

DOCUMENT RESUME

ED 189 058

SP 016 243

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TITLE Teacher Characteristics that Influence Student Evaluations.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
PUB DATE Aug 78
NOTE 19p.
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Elementary Education: Elementary School Students: Feedback: *Personality Assessment: *Self Concept: Student Attitudes: *Student Evaluation of Teacher Performance: Teacher Attitudes: Teacher Behavior: *Teacher Characteristics: *Teacher Effectiveness

ABSTRACT

The relationship between teacher personality traits and student evaluation of teacher performance was studied. Fifty-three teachers from four elementary schools were rated by their sixth grade classes. The evaluating instrument was administered six weeks into the school year and again at the end of the year. Ratings were also provided by experienced observers and the teachers' self-evaluation. Comparisons between the three sets of evaluations were made and included consideration of changes in teacher behaviors resulting from feedback from students. (JD)

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ED189058

Teacher Characteristics that Influence Student Evaluations

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The University of Texas at Austin

for
1792
Aug 78

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
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Running head: Teacher Characteristics

August, 1978

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SP 016243

Abstract

Student evaluations of teachers have been found to be both reliable and valid. The specific teacher characteristics which evoke and explain these evaluations are examined for both end-of-year evaluations and for change over the school year. Both teacher self-report personality characteristics and independent observer rated classroom behavior significantly predicted student evaluations given by sixth grade Anglo, Black, and Chicano students. Self-rated individuality, nonsocial behavior, anxiety, and attitudes toward self predicted end-of-year evaluations, while self-rated introversion and coping predicted change over the year. Teacher classroom behavior was predictive of both final evaluations and change in evaluations over the year.

Teacher Characteristics that Influence Student Evaluations

Student evaluations of teachers have been demonstrated to be quite stable across different student classes, even in different subject matter. The evaluations have correlated substantially (.68) with fairly analogous ratings by adult observers (Peck, Blattstein, & Fox, 1978). Such findings leave unanswered, though, the question of what specific teacher characteristics evoke and explain these evaluations. This paper identifies a number of such characteristics, both personal and instructional, which significantly affect students' evaluations of their teachers over a school year.

Such findings are important in themselves, insofar as they reveal what specific teacher attitudes and actions beneficially or adversely affect students. If teachers are to optimize their impact on students, however, they need individual feedback from this information.

In the absence of feedback, teacher behavior remains fairly constant from year to year (Peck, Olsson, & Green, 1978). Only with the availability of feedback does a teacher have the opportunity for self-development. The available research, limited as it is, suggests that, in certain instances, student feedback may have positive effects on teaching behavior (Braunstein, Klein, & Pachla, 1973, Aleamoni, 1974).

Increasingly, students have been asked to evaluate their teachers. Students have been chosen for a number of reasons. First, students

are the ultimate consumers. It is in their interest that a teacher improves his or her teaching skills. Since they are the individuals most greatly affected by teacher behavior, they have a personal stake in the outcome. Second, in a typical school, students are the only people who regularly see a teacher at work every day. This puts them in an advantageous position to evaluate the overall performance of the teacher. Finally, on practical grounds, it is easier and less expensive to have students describe and evaluate their teachers than to provide independent adult observers to generate such data in forms that teachers could find meaningful and useful. Peck, Blattstein, and Fox (1978) have reported that although student evaluations are initially quite anxiety-provoking to some grade school teachers, they generally take the feedback from such evaluations quite seriously. Even in cases where ratings indicated that improvement was needed, most teachers accepted the information as a constructive challenge. Some notably improved their general style of teaching in a subsequent year. Positive evaluations, of course, served as positive reinforcers and heightened teacher morale.

Along with the advantages, there are numerous potential problems involved in student evaluations. Foremost are questions such as whether student ratings of teacher effectiveness are biased by student characteristics such as SES, ethnicity, or achievement level, and whether the grades students receive influence the ratings they give to their teachers. Encompassing these issues are the broader concerns of the reliability and validity of student evaluations.

Research on evaluation of teachers has studied both grade school samples (Jones & Randall, 1978, Peck, Blattstein, & Fox, 1978, Sandefur & Adams, 1976, and Veldman, 1970) and university samples (see reviews by Costin, Greenough, & Merges, 1971, Doyle, 1976, and Kulik & McKeachie, 1975). Findings from grade school samples parallel those from university samples. Regardless of age, students apparently are able to give reliable and valid evaluations of their teachers.

Reliability

Both internal consistency and test-retest reliability have been examined. These reliabilities average in the .80's for university students. Grade school ratings have average reliabilities in the mid to high .70's. Spool (1978) found agreement among students to be relatively good for low inference evaluative items as well as descriptive items. There was less agreement on high inference items.

Validity

Freedom From Bias

Peck, Blattstein, and Fox (1978) tested to see if ethnicity or socioeconomic status of student raters had biasing effects on SET scores given six weeks into the school year and again at the end of the year. In neither case were any ethnic or SES effects found. In addition, neither achievement level of the student nor peer-rated academic coping skills biased the student ratings.

Grade/Rating Relationship

The concern is often raised that student ratings reflect grades,

or in other words, that students will award high ratings in return for easy grades. Costin, Greenough, and Merges (1971) have reviewed a number of studies which have examined this supposition. They found the studies to generally fit into two categories: (1) studies finding no relationship between students' ratings and their actual or expected course grades and (2) studies finding low significant positive correlations. The authors conclude that these latter studies " . . . might better be viewed as a partial function of the better achieving student's greater interest and motivation, rather than as a mere contamination of the validity of student ratings" (p. 519). A study by Abrami, Dickens, Perry, and Leventhal (1978) suggests that "under certain conditions, instructors who assign high grades can improve their ratings while under other conditions high grades will either adversely affect ratings or will not affect them at all" (p. 9). Surprisingly, under the "high incentive" condition, no effect of grading standards was found. They conclude that to the extent that the high incentive conditions are representative of typical classes, they found no support for claims that student evaluations are not valid due to the effect of students' grades on their ratings.

The Present Study

The concern that student characteristics may bias teacher evaluation ratings in one way or another seems to have obscured the possibility that it may indeed be teacher characteristics which influence student evaluations. A number of teacher personality variables as well

as observer rated teacher behaviors have been examined to determine whether they affect the evaluations teachers receive from their students. The teacher characteristics have been related both to the students' final evaluations and to the change in these evaluations from the beginning of the year until the end.

Method

Fifty-three teachers from four integrated tri-ethnic schools in Austin, Texas were rated by their sixth grade classes. Each class was composed of approximately 25 students heterogeneously grouped by entering achievement level and by ethnicity. The ratio of Anglo, Black, and Chicano (65:15:20) students in each class corresponded to the ethnic composition of the local community.

Each student rated his/her teacher on teacher effectiveness, using the Student Evaluation of Teaching instrument (SET), developed by Veldman and Peck (Veldman, 1970). This measure was administered six weeks into the school year (pretest) and again at the end of the school year (posttest). The internal consistency (alpha) was .73 for the pretest and .81 for the posttest (student N = 1128). Test-retest reliability over two weeks was .78 (student N = 61).

Teacher characteristic measures included eight self-report scales on personality traits and three scales from an observer-rated classroom behavior instrument. Seven of the self-report scales were from Veldman and Parker's (1970) Adjective Self-Description (ASD), which consists of Likert type items. The scales measure: (1) attitude towards self (ATT),

(2) nonproductive, nonsocial behavior (BEH), (3) efficiency (EFF), (4) introversion (INT), (5) anxiety (ANX), (6) reflectiveness, non-conformity, individualism (IND), and (7) attractiveness (ATRV). Test-retest reliabilities over a two week period range from .80 to .92 while internal consistency (alpha) reliabilities range from .64 to .88. The eighth personality scale was taken from the Views of Teaching (VOT) (Peck, 1973). This scale measures self-rated coping (COP). Internal consistency was .69 and test-retest reliability was .73.

Teacher classroom behavior was assessed by observer ratings on Ryans' Classroom Observation Record (COR) (Ryans, 1960). In rating the teachers, the observers were unaware of the factor structure of the 20 item rating system. Nevertheless, subjecting the ratings to factor analysis reproduced the three factors reported by Ryans: Kindly-understanding (KU), Systematic-organized (SO), and Stimulating-inventive (SI). Factor scores for each teacher, derived from four observers' ratings, averaged across two or three occasions, proved highly reliable (.97 to .98).

A general linear models approach was used to test whether teacher personality and classroom behavior characteristics predicted the students' evaluations of their teachers. In order to test final evaluations given at the end of the year, the following full model was used:

$$Y = T + T^2,$$

where Y is SET posttest (criterion), T is the teacher characteristic score and T^2 is the teacher characteristic score quadratic. In order to

examine the relationship of teacher characteristics to SET change over the year (regressed change), the SET pretest score was partialled from the posttest score. In addition, quadratic and interaction terms were tested. The following full model was used to examine regressed change:

$$Y = X + T + T^2 + XT + XT^2,$$

where Y is SET posttest (criterion), X is SET pretest, T is the teacher characteristic score, T^2 is the teacher characteristic score quadratic, and XT and XT^2 are the interaction terms.

Results

Results for end-of-year evaluations will be presented prior to those for change in evaluation over the year. Due to the large number of tests, only effects reaching the $p < .01$ value will be reported.

ASD attitude (ATT) related positively and linearly to final SET ratings. This indicates that teachers who saw themselves as good-natured, cheerful, and sympathetic received higher ratings from their students. In addition, teachers who considered themselves reflective and unconventional (ASD IND) were rated higher on SET. ASD Behavior predicted end-of-year SET ratings in a quadratic fashion. The lower teachers rated themselves as being maladaptive or nonsocial, the higher the SET scores they received. Teachers rating themselves intermediate or high on this scale of negative behaviors received lower SET scores. Teachers rating themselves as anxious, emotional, moody, and somewhat nervous (ASD ANX) were rated highest on student evaluations. On the other hand, teachers who did not describe themselves in these terms,

i.e., those who considered themselves calm and even tempered were rated only slightly lower. It was those teachers who rated themselves in the middle who were rated much lower.

As might be expected, teacher behavior ratings by independent observers were much more predictive of student evaluations than were the self-descriptive personality scales (see Table 1 for a comparison of the percentages of variance explained by the variables).

Insert Table 1 here

All three of the scales from Ryans' Classroom Observation Record (COR) predicted SET. Kindly-understanding (COR-KU) had a strong positive linear relationship with SET, explaining 8.37 percent of the variance. Both linear and quadratic components of Systematic-organized (COR-SO) and Stimulating-inventive (COR-SI) behavior also predicted the evaluations teachers received from their students. In both cases, the quadratic effect showed that those teachers rated high by the observers received much higher SET ratings from students.

The effects of teacher characteristics on end-of-year evaluations answer the first question. The second question concerns what teacher characteristics affect change in evaluations of teachers from the beginning to the end of the year. (The correlation between the two sets of SET ratings was .47. Therefore, it can be seen that there was indeed considerable change in the evaluations.) In order to examine this question, the teacher characteristics were used to predict regressed change on SET ratings.

Only two self-descriptive scales predicted regressed change. In each case, the effect reflected an interaction with the pretest. Teachers describing themselves as extroverted (ASD-INT) gained the least in SET if they got medium or high SET scores at the outset; such teachers gained somewhat more if they started out low in SET.

Self-rated coping on the Views of Teaching instrument (VOT-COP) also interacted with pretest SET ratings in predicting regressed change over the year. Teachers who rated themselves low in coping skills gained more in SET over the year if they were initially rated low by their students than if they had initially been rated high. The reverse occurred among teachers who gave themselves average ratings on coping skills.

In every instance change resulted in a more positive evaluation on the posttest than had been given on the pretest.

Independently rated teacher behavior predicted SET regressed change more strongly than did self-rated characteristics. COR-KU predicted SET change in a strong positive linear direction.

Both linear and quadratic components of COR-SO and COR-SI predicted SET change just as they had both predicted final SET ratings. Both linear relationships reflected strong positive effects. Teachers rated higher on the behavior scales showed greater gains in student evaluation. The quadratic effect on COR-SO indicated that teachers rated low on COR-SO received the least amount of change in student ratings. Intermediate COR-SO scores resulted in greater SET

change. However, teachers with the highest COR-SO ratings earned a still greater degree of gain in student evaluation. Low and intermediate COR-SI scores did not result in much difference in terms of SET change. On the other hand, teachers with high COR-SI scores received much improved SET ratings. Again, in all cases, changes reflected improved ratings. See Table 2 for the percentage of variance explained by each variable.

Insert Table 2 here

Discussion

Teacher variables do indeed predict evaluations given by students. Teachers who have higher self-esteem and who are insightful, reflective but spontaneous, and individualistic are given higher ratings by students. Students apparently agree with teachers who do not consider themselves maladapted or nonsocial. Interestingly, students rate teachers who are anxious, emotional worriers a little higher than teachers who judge themselves to be the opposite, and much higher than teachers who rate themselves intermediate. Perhaps the high anxiety teachers are overly hard on themselves. Or perhaps students relate to these teachers better than to those who are always calm and composed. On the other hand, it may be that the teachers at either end of the scale are more consistent in their behavior than "middle of the roaders."

Students may find consistency preferable regardless of the disposition manifested. One final suggestion which may explain this somewhat unexpected finding may be that teachers who rate themselves high on ASD-ANX are honest which may be a quality valued by the students. Further research is needed to explicate why students give teachers who display certain characteristics, the evaluative ratings they do.

It is interesting that there is no overlap between those self-rated characteristics which predict final evaluations and those which predict change. In addition, only two variables explain as much as one percent of the variance. On the other hand, teacher behavior, as rated by independent observers, predicts SET final ratings and regressed change to a much greater degree (see Tables 1 and 2). One can speculate on possible reasons for this finding. (1) It may be that personality variables affect teaching behavior which affects the students. When rating the teachers, the students may be aware of the behavior manifested by the teacher, yet be oblivious to the personality characteristics underlying that behavior. If one looks at these relationships as a chain, personality variables are one link farther removed than behavior. Thus, having only an indirect effect on the students (as opposed to a direct effect by teacher behavior), it should not be surprising that the relationship to SET is of a lesser magnitude. (2) Teacher self-ratings are undoubtedly more subjective than ratings by independent observers. Self-report measures of such value-laden characteristics have notoriously weak validity. Their

only justification usually is their low cost. If such weak detector instruments identify a significant "signal" (a relationship of teacher personality to student evaluations), it seems likely that the true relationship is even stronger, and would be identified more strongly by more valid methods.

In any case, the judgments of these sixth grade students was substantially in agreement with the judgments of experienced teacher observers. In summary, the students' evaluations appear to be, not merely subjective reactions or "popularity" votes, but a significant reflection of their teachers' real attributes and behavior. Thus, it was the teachers, who by these attributes and behaviors, determined, to the greatest extent, the student evaluations they received.

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Table 1

Percent of Variance Explained by Variables Predicting Final SET Ratings

Variable	Linear	Quadratic
ASD ATT	1.44	
ASD IND	.97	
ASD BEH		.69
ASD ANX		.86
COR-KU	8.37	
COR-SO	3.13	2.14
COR-SI	3.39	3.76

Table 2

Percent of Variance Explained by Variables Predicting SET Regressed
Change

Variable	Linear	Quadratic
X^L ¹ * ASD INT ^Q ²		.71
X^L * VOT COP ^L ³	1.0	
COR-KU	5.04	
COR-SO	1.66	1.33
COR-SI	1.50	2.25

¹ X^L is pretest linear

² Q is quadratic

³ L is linear